

183 FERC ¶ 61,153  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Acting Chairman;  
James P. Danly, Allison Clements,  
and Mark C. Christie.

Southwest Power Pool, Inc.

Docket Nos. ER22-2344-000  
ER22-2344-001

ORDER ACCEPTING TARIFF REVISIONS

(Issued May 26, 2023)

1. On July 12, 2022, as amended on December 2, 2022, pursuant to section 205 of the Federal Power Act (FPA)<sup>1</sup> and section 35.13 of the Commission's regulations,<sup>2</sup> Southwest Power Pool, Inc. (SPP) filed proposed revisions to its Open Access Transmission Tariff (Tariff) to establish the framework under which an electric storage resource may be considered a transmission asset. In this order, we accept SPP's proposed Tariff revisions and direct SPP to notify the Commission of the actual effective date of the Tariff revisions no less than 30 days prior to the date the proposed Tariff revisions are implemented, as discussed below.

**I. Background**

2. In *Nevada Hydro I*, the Commission denied a request that a pumped storage project (Lake Elsinore Advanced Pumped Storage project, or LEAPS) be treated as a transmission facility under the operational control of California Independent System Operator Corporation (CAISO) and that the cost of the project be included in CAISO's rolled-in transmission access charge.<sup>3</sup> The Commission stated that the purpose of CAISO's transmission access charge is to recover the costs of transmission facilities under the control of CAISO, not to recover the costs of bundled services.<sup>4</sup> The Commission found that it would not be appropriate for CAISO to assume operational

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<sup>1</sup> 16 U.S.C. § 824d.

<sup>2</sup> 18 C.F.R. § 35.13 (2022).

<sup>3</sup> *Nev. Hydro Co.*, 122 FERC ¶ 61,272, at PP 82-83 (2008) (*Nevada Hydro I*).

<sup>4</sup> *Id.* P 83.

control over the pumped-storage facility.<sup>5</sup> The Commission stated that, for these reasons, LEAPS' costs were not properly recovered through the transmission access charge. The Commission added that, absent information that justified treating LEAPS differently from the existing pumped hydro facilities in CAISO's footprint, allowing LEAPS to receive a guaranteed revenue stream through CAISO's transmission access charge would create an undue preference for LEAPS compared to these other similarly situated pumped hydro generators.<sup>6</sup>

3. Subsequently, in *Western Grid*, the Commission granted a petition for declaratory order from Western Grid, requesting that the Commission classify its electric storage resources as transmission for cost-based recovery purposes, finding (among other things) that when operated at CAISO's direction to provide voltage support and thermal overload protection for relevant transmission facilities, the electric storage resource would function as wholesale transmission facilities.<sup>7</sup>

4. In 2017, the Commission issued a policy statement providing guidance and clarification on, among other things, the ability of electric storage resources to receive cost-based rate recovery for certain services, such as transmission or grid support services, while also receiving market-based revenues for providing separate market-based rate services.<sup>8</sup>

5. In 2018, the Commission dismissed a petition requesting that the Commission find that the LEAPS project is a transmission facility consistent with *Western Grid* and the 2017 Policy Statement and that the project was entitled to cost-based recovery.<sup>9</sup> The petition was dismissed as premature as the project had not yet been studied in CAISO's regional transmission planning process, and the Commission concluded that it could not make a reasoned decision as to whether the project was a transmission project and thus eligible for cost recovery under CAISO's rolled-in transmission access charge.<sup>10</sup>

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<sup>5</sup> *Id.* P 82.

<sup>6</sup> *Id.* P 83.

<sup>7</sup> *W. Grid Dev., LLC*, 130 FERC ¶ 61,056, at PP 45, 46, *order on reh'g*, 133 FERC ¶ 61,029 (2010) (*Western Grid*).

<sup>8</sup> *Utilization of Elec. Storage Res. for Multiple Servs. When Receiving Cost-Based Rate Recovery*, 158 FERC ¶ 61,051, at P 9 (2017) (2017 Policy Statement).

<sup>9</sup> *Nev. Hydro Co.*, 164 FERC ¶ 61,197 (2018) (*Nevada Hydro II*).

<sup>10</sup> *Id.* P 22.

6. In 2020, the Commission accepted a proposal by Midcontinent Independent System Operator, Inc. (MISO) to revise its Open Access Transmission, Energy, and Operating Reserve Markets Tariff to allow electric storage resources that serve a transmission function to be approved as the preferred solutions to transmission issues identified in the MISO Transmission Expansion Plan and to have their costs recovered through cost-based transmission rates.<sup>11</sup>

## II. Filing

7. SPP proposes Tariff revisions that it states establish a framework under which electric storage resources may be considered transmission assets.<sup>12</sup> Specifically, SPP states that the proposed revisions add a definition of Storage as a Transmission-Only Asset (SATO) and include facilitating Tariff language to address the cost allocation and recovery, transmission planning, interconnection, market participation, and market monitoring issues related to SATOs.

8. SPP requests an effective date of “12/31/9998” for its proposed Tariff language, to allow SPP staff time to implement the changes in SPP’s software systems following Commission acceptance of its filing.<sup>13</sup> SPP commits to submitting a filing with the Commission specifying a precise effective date prior to implementation, which SPP targets for the third quarter of 2025. SPP requests waiver of the Commission’s notice requirements to allow these tariff revisions to be effective more than 120 days after the date of filing.

## III. Notice and Responsive Pleadings

9. Notice of SPP’s Filing was published in the *Federal Register*, 87 Fed. Reg. 42,718 (July 18, 2022), with interventions and protests due on or before August 2, 2022. Timely motions to intervene were filed by: Evergy Kansas Central, Inc., Evergy Metro, Inc., and Evergy Missouri West, Inc.; American Electric Power Service Corporation, on behalf of its affiliates Public Service Company of Oklahoma, Southwestern Electric Power Company, AEP Oklahoma Transmission Company, Inc., and AEP Southwestern Transmission Company, Inc. (collectively, AEP); Xcel Energy Services Inc., on behalf of its affiliate Southwestern Public Service Company; Sunflower Electric Power Corporation; Western Area Power Administration; and Omaha Public Power District.

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<sup>11</sup> *Midcontinent Indep. Sys. Operator, Inc.*, 172 FERC ¶ 61,132, *reh’g denied*, 173 FERC ¶ 62,022 (2020) (MISO Order).

<sup>12</sup> Filing at 1.

<sup>13</sup> *Id.*

10. The SPP Market Monitoring Unit (Market Monitor) filed a timely motion to intervene and comments in support of SPP's proposal. Clean Energy Entities<sup>14</sup> filed a timely motion to intervene and protest. SPP and AEP filed answers to Clean Energy Entities' protest.

11. On November 2, 2022, Commission staff issued a deficiency letter requesting additional information about SPP's filing (Deficiency Letter). On December 2, 2022, SPP filed a response to the Deficiency Letter (Deficiency Response). Notice of SPP's Deficiency Response was published in the *Federal Register*, 87 Fed. Reg. 75,619 (Dec. 9, 2022), with interventions and protests due on or before December 23, 2022. None was filed.

#### **IV. Commission Determination**

##### **A. Procedural Issues**

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2022), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

13. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2022), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept SPP's and AEP's answers because they have provided information that assisted us in our decision-making process.

##### **B. Substantive Issues**

14. As discussed below, we find that SPP's proposed Tariff revisions to establish a framework under which an electric storage resource may be considered a transmission asset are just and reasonable and not unduly discriminatory or preferential, and we therefore accept them. We direct SPP to make an informational filing notifying the Commission of the actual effective date of the proposed Tariff revisions no less than 30 days prior to the date it implements the proposed Tariff revisions.<sup>15</sup>

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<sup>14</sup> Clean Energy Entities include American Clean Power Association and Advanced Power Alliance.

<sup>15</sup> SPP should use the following eTariff Type of Filing Code: 150 Data Response/ Supplement the Record. We grant SPP's request for waiver of the Commission's 120-day notice requirement for good cause shown. *See* 18 C.F.R. § 35.3(a)(1) (2022).

**1. Evaluation, Selection, Cost Allocation and Recovery**

**a. Filing**

15. SPP proposes Tariff revisions that it states will allow electric storage resources to be considered transmission assets under its Tariff and will allow for the appropriate selection of SATOAs.<sup>16</sup> SPP states that its proposal does not allow SATOAs to act as multi-use assets, and SATOAs will participate in SPP's Integrated Marketplace<sup>17</sup> solely for the purpose of accounting for their market impact.

16. SPP proposes to define a SATOA as:

An Electric Storage Resource connected to, or issued [a Notification to Construct] to be connected to, the Transmission System as a transmission facility solely to support the Transmission System. The SATOA shall not participate in the Energy and Operating Reserve Markets except to the extent necessary to provide the services for which the SATOA was issued [a Notification to Construct]. SATOAs, as transmission facilities and in accordance with the otherwise applicable terms of the Tariff, may be determined to be Direct Assignment Facilities, Network Upgrades, Base Plan Upgrades, facilities included in approved Balanced Portfolios, Sponsored Upgrades, Service Upgrades, [Integrated Transmission Planning] Upgrades, high priority upgrades, generation interconnection related Network Upgrades, Zonal Reliability Upgrades, or Interregional Projects as Network Upgrades. SATOAs are not eligible for being used for Resource Adequacy Requirements as defined in Attachment AA of this Tariff.<sup>18</sup>

17. In addition, SPP proposes to revise section III of Attachment O (The Integrated Transmission Planning Assessment) of its Tariff to add provisions outlining the conditions for a storage solution to be evaluated as a potential SATOA. SPP's proposed Tariff language states that a storage solution must demonstrate a basis for evaluation as a

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<sup>16</sup> Filing at 7.

<sup>17</sup> The Integrated Marketplace includes SPP's day-ahead market, real-time balancing market, transmission congestion rights market, and reliability unit commitment processes. SPP, Tariff, attach. AE, § 1.1 (Definitions I) (5.0.0), Integrated Marketplace.

<sup>18</sup> SPP, Proposed Tariff, pt. I, § 1, Definitions S (4.1.0).

transmission asset by: (1) unique characteristics or circumstances of the proposed storage solution necessary to meet the identified transmission system performance requirements and not otherwise available at comparable costs from other proposed solutions, including speed of operation, lead-time to implement, right-of-way or other property consideration; and (2) a need to resolve the transmission issue or issues through the storage facility's function as a SATOA instead of as a resource in SPP's markets.<sup>19</sup> SPP's proposed language further states that "a storage facility will not be evaluated as a potential SATOA to resolve a transmission issue that can be addressed by a market solution."<sup>20</sup> SPP's proposed Tariff provisions also require a proposed storage solution to provide: (1) information on the SATOA's expected useful life; (2) equipment replacement schedules and associated lifecycle costs and other ongoing costs to maintain the SATOA at its required capacity and energy capability necessary to address the need identified, or otherwise comparable to a traditional wires solution; and (3) other cost or performance information that SPP may determine is necessary to compare cost and performance with other proposed solutions to the need identified.<sup>21</sup>

18. SPP states that its SATOA definition is appropriately narrow in scope by requiring a SATOA to be connected to the transmission system as a transmission facility solely to support the transmission system.<sup>22</sup> SPP also states that many aspects of its proposal are consistent with the Commission's determinations in the MISO Order.<sup>23</sup> SPP contends that, similar to MISO's framework, SPP's proposal: (1) allows for a SATOA to be approved through the transmission planning process as any of the existing transmission project types based on meeting the same qualification requirements for traditional transmission solutions; (2) requires a SATOA to be evaluated in the same manner as traditional transmission solutions; and (3) enables SPP to determine that a SATOA would be the preferred solution to address a particular transmission issue. SPP states that the SATOA must be preferable to a traditional wires solution based on the condition that the SATOA has some relevant quality that a traditional transmission solution lacks, such as solving a transmission issue more flexibly, having a smaller installation footprint, or having a lower cost relative to a traditional wires solution.<sup>24</sup> SPP also states that it does not believe that these proposed Tariff changes will have a meaningful impact on its

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<sup>19</sup> SPP, Proposed Tariff, attach. O, § III (10.0.0), § III.6(b).

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> Filing at 8 (citing *Am. Elec. Power Serv. Corp.*, 173 FERC ¶ 61,264 (2020)).

<sup>23</sup> *Id.* at 7-8.

<sup>24</sup> *Id.* at 7.

generator interconnection queue as SPP's limited definition of a SATOA should prevent new generation from queue jumping by appearing to qualify as SATOAs.<sup>25</sup>

19. SPP states that its proposed Tariff revisions allow for SATOAs to receive cost-of-service rate treatment and cost allocation under circumstances where they function as transmission assets.<sup>26</sup> Under SPP's proposal, a SATOA would use the applicable existing cost allocation method for the transmission facility type for which the SATOA qualifies. In addition, cost allocation for a SATOA would be limited to the cost of the maximum capacity needed to address the identified transmission issue and pro-rated on that basis if a SATOA of higher capacity is constructed.<sup>27</sup> SPP states that cost allocation would be based on the voltage level associated with the transmission issue being resolved by the SATOA.<sup>28</sup> Further, SPP proposes Tariff revisions to specify that all revenues distributed to transmission owners for dispatches into SPP's energy and operating reserve markets from SATOAs, are to be credited against the revenue requirement of the SATOA.<sup>29</sup>

20. Separately, SPP states that it will require SATOAs to operate consistent with an operating guide that will be created for the specific issues that the SATOA is constructed to resolve.<sup>30</sup> SPP also proposes to modify its generator interconnection procedures to specify that a generating facility will not include a SATOA.<sup>31</sup>

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<sup>25</sup> *Id.* at 9.

<sup>26</sup> *Id.* at 7.

<sup>27</sup> SPP, Proposed Tariff, attach. J, § IX (Upgrades that are SATOAs) (0.0.0).

<sup>28</sup> Filing at 8; SPP, Proposed Tariff, attach. J, § III (Base Plan Upgrades) (14.0.0).

<sup>29</sup> Filing at 10; *see, e.g.*, SPP, Proposed Tariff, Schedule 11 (Base Plan Zonal Charge and Region-Wide Charge) (10.0.0), §§ II, II.A, II.B.

<sup>30</sup> Filing at 7.

<sup>31</sup> Filing at 15; SPP, Proposed Tariff, attach. V, § 1 Definitions (11.0.0); *id.* app. 6 (Generation Interconnection Agreement (GIA)) (18.0.0); *id.* app. 8 (Interim Generator Interconnection Agreement (Interim GIA)) (16.0.0); *id.* app. 13 (Generator Interconnection Agreement (GIA)) (14.0.0); *id.* app. 14 (Interim Generator Interconnection Agreement (Interim GIA)) (14.0.0).

**b. Comments, Protests, and Answers**

21. Clean Energy Entities request that the Commission require SPP to include in its Tariff a restriction on the use of SATOAs so that they can only be used to address “non-routine” reliability transmission issues, and notes that the Commission required such a restriction on SATOAs in MISO’s proposal.<sup>32</sup> Clean Energy Entities contend that SPP’s proposed Tariff language could permit SATOAs to be used for more routine transmission issues within each resource’s voltage parameters, providing congestion management as an example.<sup>33</sup> Clean Energy Entities state that SPP’s proposed Tariff language does not specify how SPP will evaluate the viability of a market solution for a transmission issue. Clean Energy Entities also request that the Commission require SPP to explain how SATOAs will be evaluated in comparison to potential market solutions.

22. In its answer, SPP disagrees with Clean Energy Entities’ argument that SPP should restrict SATOAs to non-routine transmission issues, asserting that its proposal for selecting and evaluating SATOAs is appropriately limited as a SATOA could only be selected if it is preferable to a traditional wires solution and the identified transmission need could not be addressed by a market solution.<sup>34</sup> SPP argues that it would be unduly discriminatory to prevent a SATOA from addressing a routine transmission issue that could not be addressed by a market solution. For example, SPP notes that voltage support is a routine transmission issue that could be one of the primary uses of a SATOA. SPP further argues that the Commission’s directive to MISO in the MISO Order indicated that a non-routine reliability transmission issue is not an N-0 or N-1 contingency.<sup>35</sup> SPP argues that N-0 and N-1 contingencies would most likely be resolved by market solutions and thus, under SPP’s proposal, SATOAs would be appropriately ineligible for consideration to meet those needs. SPP argues that requiring additional information about how it will evaluate SATOAs in comparison to potential market solutions would go beyond what is appropriate to include in the Tariff at this time, as SPP should have the flexibility to modify its evaluation processes as it gains experience in implementing SATOA evaluations.<sup>36</sup>

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<sup>32</sup> Clean Energy Entities Protest at 3 (citing MISO Order, 172 FERC ¶ 61,132 at P 58).

<sup>33</sup> *Id.* at 4.

<sup>34</sup> SPP Answer at 3.

<sup>35</sup> *Id.* (citing MISO Order, 172 FERC ¶ 61,132 at P 58).

<sup>36</sup> *Id.* at 3-4.



23. AEP contends that SPP has demonstrated that its proposal is just and reasonable.<sup>37</sup> AEP argues that Clean Energy Entities' attempt to put limitations on the use of storage resources is speculative, beyond the scope of the proceeding, and inconsistent with storage resources' ability to provide valuable reliability services such as voltage support at lower costs.

**c. Deficiency Letter and Response**

24. In the Deficiency Letter, Commission staff asked SPP to explain how it will conduct an evaluation of a proposed SATOA's ability to meet the identified transmission system performance requirements, including any additional criteria that will be used to reflect a SATOA's unique characteristics.<sup>38</sup> In the Deficiency Response, SPP states that it evaluates a transmission project's "ability to resolve observed needs as part of SPP's reliability studies," and that SATOAs would be judged on their cost and ability to address the need in a similar manner to other transmission projects.<sup>39</sup> SPP also states that it has developed a method to estimate the necessary discharge time for a SATOA given the system conditions driving the need for the transmission projects.

25. In the Deficiency Letter, Commission staff also requested that SPP explain how it will determine whether there is a need to resolve a transmission issue through a storage facility's function as a SATOA, and how SPP will determine whether a market solution to an identified transmission issue exists or that an identified transmission issue could not otherwise be addressed by a market solution.<sup>40</sup> In the Deficiency Response, SPP explains that it plans to utilize its market power flow models, which represent real-time flows, to judge whether a need has a potential market solution or if it is a true reliability need.<sup>41</sup> SPP states that market resources are dispatched differently than transmission facilities that are used solely to support reliability and that, for example, a market storage resource would be expected to charge and discharge based on market conditions. SPP posits that in that circumstance, a market storage resource would thus be unavailable to discharge when needed to address the identified transmission need. SPP states that if modeling indicates that a market dispatch of a storage resource would solve the system need, the

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<sup>37</sup> AEP Answer at 2.

<sup>38</sup> Deficiency Letter at 2.

<sup>39</sup> Deficiency Response at 5.

<sup>40</sup> Deficiency Letter at 2.

<sup>41</sup> Deficiency Response at 5.

storage resource would not be eligible to be included in SPP's rates as a SATOA. In addition, SPP confirmed that it will require functional control of SATOAs.

26. In the Deficiency Letter, Commission staff requested that SPP explain whether SPP will assess a proposed SATOA's impact on resources already in SPP's generator interconnection queue or consider any such potential impacts or associated costs in SPP's evaluation process for SATOAs.<sup>42</sup> SPP explains that SATOAs will be evaluated in SPP's transmission planning process and, once approved, will be included in the transmission model used to assess generator interconnection, consistent with the treatment of other transmission assets.<sup>43</sup> SPP further explains that, similar to the addition of other transmission assets, the addition of SATOAs might change flows in ways that are favorable or detrimental to resources in the queue.<sup>44</sup> SPP states that proposed resources in the generator interconnection queue do not presently receive mitigation for changes that occur as a result of additions to or modifications of the transmission system and that it does not propose to change this approach to the generator interconnection study.

27. In addition, in the Deficiency Letter, Commission staff requested that SPP clarify whether its proposed revisions to section III of Attachment O, outlining the conditions for a storage solution to be evaluated as a potential SATOA, are intended to apply to all proposed SATOAs regardless of the type of transmission facility or whether it would apply only to ITP Upgrades.<sup>45</sup> SPP explains that the Tariff language it proposes to add to section III of Attachment O would be directly applicable to transmission facilities that are ITP Upgrades but also reflects how SPP would consider the use of SATOAs for other transmission needs.<sup>46</sup>

**d. Commission Determination**

28. We find that SPP's proposed framework for electric storage resources to be considered transmission-only assets is just and reasonable and not unduly discriminatory or preferential.

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<sup>42</sup> Deficiency Letter at 3.

<sup>43</sup> Deficiency Response at 6.

<sup>44</sup> *Id.* at 7.

<sup>45</sup> Deficiency Letter at 2-3.

<sup>46</sup> Deficiency Response at 6. ITP Upgrades are defined as those upgrades identified and analyzed through the Integrated Transmission Planning Assessment as described in Section III of Attachment O. SPP, Tariff, pt. 1, § 1, Definitions I (4.0.0).

29. SPP's proposed framework will result in the selection of SATOAs only when those resources perform a transmission function. SPP's proposal ensures that a SATOA will serve a transmission function because: (1) under SPP's proposed definition, a SATOA must be connected to the transmission system as a transmission facility solely to support SPP's transmission system; (2) a proposed SATOA must be identified or selected in SPP's transmission planning processes as the preferred solution to resolve a transmission issue; (3) there must be a need to resolve the transmission issue through the storage facility's function as a SATOA, as the transmission issue cannot be addressed by a market solution; (4) a SATOA's participation in the markets is limited to only charging from, and discharging to, the SPP transmission system as necessary to provide the services for which the SATOA was issued a Notification to Construct; and (5) the SATOA will be under SPP's operational control. We find that in these circumstances, SATOAs are properly characterized as transmission assets, and the costs of a SATOA are appropriately recoverable through transmission rates.

30. We understand that SPP's proposed Tariff language in section III of Attachment O, outlining the conditions for a proposed storage solution to be evaluated as a SATOA, describes how SPP will evaluate SATOAs as any transmission facility type. As SPP explains, while its proposed Tariff language applies directly to the Tariff provisions discussing transmission facilities that are ITP Upgrades, it reflects how SPP would consider the use of SATOAs for other transmission needs.<sup>47</sup>

31. We also find just and reasonable SPP's proposal to make a SATOA eligible to use the applicable existing transmission cost allocation and recovery methods that apply to the relevant transmission project type for which the SATOA qualifies under SPP's Tariff. Because the operation of a SATOA would be limited to serving a transmission function, it is appropriate that a SATOA recover costs in the same manner as existing transmission facilities in the same transmission project category. In addition, cost allocation for a SATOA is appropriately limited to the cost of the maximum capacity needed to address the identified transmission issue and is prorated on that basis if a SATOA of higher capacity is constructed.

32. Regarding Clean Energy Entities' request that the Commission direct SPP to include a Tariff restriction on the use of SATOAs for "non-routine" issues in order to prevent the use of SATOAs for uses such as routine congestion management, we note that SPP's proposed Tariff language restricts a SATOA from being proposed to resolve a transmission need for which a market solution exists.<sup>48</sup> As SPP states, N-0 or N-1 contingencies would most likely be resolved by market solutions, and thus SATOAs

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<sup>47</sup> Deficiency Response at 6.

<sup>48</sup> SPP, Proposed Tariff, attach. O, § III (10.0.0), § III.6(b).

would be ineligible for consideration to meet those needs.<sup>49</sup> Moreover, SPP will only evaluate a storage solution as a potential SATOA to address an identified transmission issue if it has unique characteristics or circumstances to meet the transmission system performance requirements that are not available at comparable costs from other proposed solutions.

33. Finally, regarding Clean Energy Entities' contention that SPP does not provide sufficient detail on how it will determine whether a transmission need could be resolved by a market solution, we note that SPP explains in its Deficiency Response that it will use its market power flow models to make such a determination.<sup>50</sup> We find that SPP's proposed Tariff language provides a sufficient level of detail by requiring that a storage solution demonstrate a need to resolve the transmission issue through its function as a SATOA, as the transmission issue could not be resolved by a market solution, similar to MISO's tariff.<sup>51</sup> We therefore decline to require SPP to include greater detail in the Tariff regarding how it will determine whether a transmission need could be resolved by a market solution.

## 2. SATOA Market Activities and Market Impacts

### a. Filing

34. SPP states that its proposal will not cause adverse effects on wholesale electric markets, will allow SATOAs to participate in the Integrated Marketplace solely for the purpose of accounting for the SATOAs' market impact, and will limit the ability of SATOAs to benefit from their limited Integrated Marketplace participation.<sup>52</sup> SPP explains that market costs associated with charging a SATOA are includable in a SATOA's transmission revenue requirement, but that the proposed Tariff revisions specify that all revenues from SATOA dispatches into the market are to be credited against the revenue requirement of the SATOA. SPP asserts that the crediting means that

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<sup>49</sup> SPP Answer at 3-4.

<sup>50</sup> Deficiency Response at 5.

<sup>51</sup> SPP, Proposed Tariff, attach. O, § III.6 (10.0.0), § III.6(b). *See* MISO, Open Access Transmission, Energy, and Operating Reserve Markets Tariff, attach. FF, (88.0.0), § II.G.1.c(i)(b) (providing, similar to SPP's Tariff, that a storage facility will not be evaluated as a potential SATOA to resolve a routine transmission issue that can be addressed by a market solution); *see also* MISO Order, 172 FERC ¶ 61,132 at P 58.

<sup>52</sup> Filing at 9, 10.

the SATOA owner will be indifferent to pressures to profit from market interactions.<sup>53</sup> SPP also states that virtual transactions are not allowed at the price nodes associated with the SATOA, which SPP asserts further limits a SATOA's indirect ability to adversely affect wholesale electric markets.

35. Specifically, SPP's proposed Tariff revisions to Attachment AE provide that SATOAs must be registered as a Market Storage Resource<sup>54</sup> by a market participant in the energy and operating reserve markets to account for and settle the injections and withdrawals to the extent necessary to provide the services for which the SATOA was issued a Notification to Construct.<sup>55</sup> In addition, a market participant that registers a SATOA: (1) cannot have any assets other than SATOAs registered in the energy and operating reserve markets; (2) cannot participate in interchange transactions, virtual energy offers, virtual energy bids, or bilateral settlement schedules; and (3) will not have the capability to submit monetary offers for injection or withdrawals associated with a SATOA. SPP's proposed Tariff revisions also state that SATOA injections and withdrawals will be included in the energy and operating reserve markets to ensure power balance is maintained but will not have offers associated with the injections and withdrawals and will not be dispatched by the energy and operating reserve markets. The injections and withdrawals of a SATOA will be settled at the locational marginal price of the SATOA for day-ahead and real-time energy amounts and over-collected losses distribution amount. Further, SATOAs are ineligible for make-whole payment charges or credits, or operating reserve distribution charges or credits. In addition, virtual energy offers, virtual energy bids, and demand bids will not be allowed at the price node associated with the SATOA. Finally, under SPP's proposal, SATOAs may also be called on to help alleviate emergency conditions, with the injection or withdrawal settled at the locational marginal price of the SATOA.<sup>56</sup>

36. SPP asserts that the requirement for SATOAs to be registered under market participants that only have SATOA assets, and not allowing such participants to offer virtual energy offers or bids, interchange transaction, or bilateral settlement schedules, would allow SPP to separate offer and settlement data for SATOAs from other market

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<sup>53</sup> *Id.* at 10; *see also* SPP, Proposed Tariff, attach. AE, § 2.20 (Storage as a Transmission Only Asset ("SATOAs")) (0.0.0).

<sup>54</sup> Market Storage Resource is SPP's existing designated participation model for electric storage resources to participate in SPP's Integrated Marketplace. SPP, Tariff, attach. AE, § 2.17 Electric Storage Resource (1.0.0).

<sup>55</sup> Filing at 15-16; SPP, Proposed Tariff, attach. AE, § 2.20 (Storage as a Transmission Only Asset ("SATOAs")) (0.0.0).

<sup>56</sup> Filing at 16-17; SPP, Proposed Tariff, attach. AE, § 2.20 (0.0.0), § 2.20(10).

participants and separate market activity.<sup>57</sup> SPP asserts that this is consistent with the Commission's Independent Function Rule, which states that a transmission provider's transmission function employees must function independently of its marketing function employees.<sup>58</sup>

**b. Comments, Protests, and Answers**

37. Clean Energy Entities agree that SPP's filing would appropriately restrict SATOAs from market participation, and state that SPP's proposal will provide separation between transmission uses and market participation.<sup>59</sup> Clean Energy Entities argue, however, that the Commission should expressly clarify that any SATOA that seeks to become a market resource would first have to be fully evaluated through SPP's generator interconnection process.<sup>60</sup> Clean Energy Entities further state that any such generator interconnection studies should not evaluate SATOAs as both load and generation and that, if SPP or a SATOA owner seek to have a SATOA resource participate in energy or ancillary services markets, the Commission should ensure that no undue preference or discrimination results from the change in status.<sup>61</sup>

38. Clean Energy Entities state that SPP's proposal would allow SATOAs to be called upon to alleviate emergency conditions, which could in some circumstances affect compensation for market participants.<sup>62</sup> Clean Energy Entities urge the Commission to require SPP to clarify that the dispatch of SATOAs in emergency conditions would only be as a last resort, with any effect on market prices fully disclosed.<sup>63</sup>

39. In its answer, SPP argues that Clean Energy Entities' request for clarification regarding SATOAs potentially acting as market resources is beyond the scope of the

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<sup>57</sup> Filing at 10-11.

<sup>58</sup> *Id.* at 11 (citing 18 C.F.R. § 358.5 (2022)).

<sup>59</sup> Clean Energy Entities Protest at 1-2.

<sup>60</sup> *Id.* at 2.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at 4.

<sup>63</sup> *Id.*

filing.<sup>64</sup> SPP asserts that its proposed Tariff changes do not allow for SATOAs to act as market resources, and consideration of any Tariff changes not proposed is speculative.

40. SPP also contends that SATOAs are effectively already a last resort during any emergency conditions because all available resources have been committed to meet forecasted or actual firm load.<sup>65</sup> SPP explains that if a SATOA is called on during an emergency condition, its operation would be recognized by and reflected in the market solution; however, the SATOA would be considered a price-taker within the market, and its operation cannot be the basis for establishing market prices. SPP further argues that requiring market price effect disclosures or additional procedures when attempting to manage emergency conditions would impede its efforts to manage emergency conditions.<sup>66</sup>

**c. Deficiency Letter and Response**

41. Regarding the use of SATOAs during emergency conditions, SPP states that it would likely discharge a SATOA to prevent load shed.<sup>67</sup> However, SPP further states that, as a SATOA's ability to discharge energy is finite and the relative importance of a SATOA in managing the emergency condition is unknown, the details of when and how SPP would order a SATOA to discharge during any level of energy emergency alert are difficult to predict. SPP states that its proposed Tariff language is intended to be consistent with SPP's ability to flexibly manage energy emergencies without causing adverse effects on wholesale markets.<sup>68</sup>

**d. Commission Determination**

42. We find that SPP's proposed Tariff revisions place appropriate limitations on SATOAs' market activities and are therefore just and reasonable. SPP's proposed Tariff language limits SATOAs' participation in SPP's energy and operating reserve markets to injections and withdrawals necessary to provide the services for which the SATOA was issued a Notification to Construct, establishes requirements for market registration and

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<sup>64</sup> SPP Answer at 3.

<sup>65</sup> *Id.* at 4 (citing SPP, *BA Emergency Operating Plan v. 8.1*, at 28-29 (Aug. 2022), <https://spp.org/documents/67643/spp%20ba%20emergency%20operating%20plan%20v%208.1%20-%20redline.pdf>).

<sup>66</sup> *Id.* at 4-5.

<sup>67</sup> Deficiency Response at 8.

<sup>68</sup> *Id.* at 9.

restrictions on submission of monetary offers and virtual bid and offers, and requires that any revenue that a SATOA receives from SPP's energy and operating reserve markets are credited against a SATOA's revenue requirement.

43. In addition, given SPP's explanation that the use of SATOAs during an emergency condition is effectively a last resort, that the SATOA's injection or withdrawal will be settled at the locational marginal price of the SATOA, and that the SATOA would be considered a price taker within the market and its operation cannot be the basis for establishing market prices, we find it unnecessary to require SPP to make any further clarification on these issues, as Clean Energy Entities request.

44. Finally, we find that Clean Energy Entities' request that the Commission clarify that storage resources seeking to be both transmission assets and market resources first be fully evaluated through the generator interconnection process is beyond the scope of this proceeding, as SPP is not proposing here to allow SATOAs to become market resources.

### 3. Market Monitoring

#### a. Filing

45. SPP states that its proposal would prevent SATOAs from exercising transmission market power and that the proposed revisions to the market monitoring plan in Attachment AG of the Tariff clarify that stored energy transmission assets, which include SATOAs, are within the scope of the Market Monitor's purview.<sup>69</sup> Regarding the use of the undefined term "stored energy transmission asset" in the proposed revisions to Attachment AG, SPP explains that the term is intended to be more flexible and inclusive than the term SATOA and would reduce the need for future changes to Attachment AG if future changes to the Tariff allow for electric storage resources to act both as generation and transmission assets. SPP states that the proposed Attachment AG revisions clarify that operating a storage energy transmission asset contrary to the reliability coordinator's instructions, or contrary to the stored energy transmission asset's operating guide, is potentially indicative of an exercise of transmission market power.<sup>70</sup> SPP's proposed Tariff revisions also provide that physical withholding will now include: (1) declaring that the capability of a stored energy transmission asset is reduced for reasons that are not

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<sup>69</sup> Filing at 11.

<sup>70</sup> *Id.* at 11-12; SPP, Proposed Tariff, attach. AG Market Monitoring Plan, § 4 (6.0.0), § 4.5(e).



true or verifiable; and (2) operating a stored energy transmission asset in a manner inconsistent with the reliability coordinator's direction or its operating guide.<sup>71</sup>

**b. Comments**

46. The Market Monitor filed comments in support of SPP's proposed revisions to Attachment AG clarifying the Market Monitor's authority to monitor for potential exercises of market power by stored energy transmission assets.<sup>72</sup> The Market Monitor states that SPP's proposed Tariff language clarifying the Market Monitor's authority to monitor market power of stored energy transmission assets is necessary and appropriately describes potential market power activities that come with the capabilities of those stored energy transmission assets.<sup>73</sup>

**c. Deficiency Letter and Response**

47. Commission staff requested additional information regarding SPP's proposed use of the term "stored energy transmission asset" in Attachment AG.<sup>74</sup> In the Deficiency Response, SPP provided comments from the Market Monitor explaining that the proposed use of the generic term is aimed at mitigation measures to be able to address varying configurations of electric storage resources, including a SATOA and a multi-use electric storage resource, should they be subject to market power evaluation.<sup>75</sup> The Market Monitor states that the use of the generic term would be more effective in addressing a wider spectrum of instances for potential physical withholding of transmission or storage capacity, and the exercise of transmission market power.<sup>76</sup>

**d. Commission Determination**

48. We find that SPP's proposed revisions to the market monitoring plan in Attachment AG of the Tariff will appropriately clarify the Market Monitor's authority to

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<sup>71</sup> Filing at 19; SPP, Proposed Tariff, attach. AG Market Monitoring Plan, § 4 (6.0.0), §§ 4.6.4(1)(d), 4.5(e).

<sup>72</sup> Market Monitor Comments at 1-2.

<sup>73</sup> *Id.* at 5.

<sup>74</sup> Deficiency Letter at 5.

<sup>75</sup> Deficiency Response, Ex. SPP-0001, at 1.

<sup>76</sup> *Id.*

Docket Nos. ER22-2344-000 and ER22-2344-001

- 18 -

monitor for potential exercises of market power by stored energy transmission assets, which include SATOAs, and are therefore just and reasonable.

The Commission orders:

(A) SPP's proposed Tariff revisions are hereby accepted, as discussed in the body of this order.

(B) SPP is hereby ordered to submit an informational filing, as discussed in the body of this order.

By the Commission.

( S E A L )

Debbie-Anne A. Reese,  
Deputy Secretary.

Document Content (s)

ER22-2344-000.docx.....1